yellow colour, which, after all, is the usual colour of motions which are rapidly driven along the small and large intestine. I had, however, at one time a patient suffering from typical psilosis, whom I sent to spend a month with her brother, an army surgeon of long experience in India. When he brought her back to me he said: "The disease from which my sister is suffering is new to me. I have not observed it in the parts of India in which I have served, and it is not 'hill diarrhœa,' of which I have seen hundreds of cases." Typical psilosis occurs in Ceylon, and I have seen well marked examples in patients who have returned from that island. I have not met with evidence to show that it occurs at all commonly in Bombay or Calcutta. Cases of severe wasting diarrhœa from these parts of India about which I have been asked to give an opinion have so far been none of them cases of psilosis. Typical examples of the two distinct affections—the common chronic diarrhœa of India, and psilosis of the tongue and small intestine—are related in a paper presented by me to the Royal Medical and Chirurgical Society, and published in the seventy-fifth volume of the *Transactions* (1892).

As regards the presence of mica in the drinking water as a cause of this disease, I should regard the theory as improbable. I am not familiar with the distribution of mica in the world, but to prove it to be the cause of psilosis it would have to be found not only in Ceylon, but in the drinking water in the Straits Settlements, Hong Kong, the whole China coast, and at least several widely distant parts in the interior of China, in Java, and the Phillipine Islands, in all of which places psilosis is very common. In the *Encyclopædia Britannica* I find it stated that mica is found in Finland, New York, Canada, Shetland, Sutherland, Ross-shire, Inverness, Skye, Fifeshire, New York, and Greenland, from all of which parts no case of psilosis has yet been reported. The only place where psilosis is common, and in which the presence of mica is noted, is Ceylon. Besides there are facts connected with the clinical features of this disease which cannot be reconciled with the mica theory. Patients who have been for a long time quite well are subject to relapses from chill and error of diet, although they have returned to England, where no case of this disease has ever been known to arise. Nay more, the disease may show itself in an unmistakable form for the first time after a patient has returned to England. An extraordinary instance of this occurred in the case of a patient who consulted me last summer. A lady, who had returned from China seventeen years before, developed unmistakable symptoms of psilosis, which had existed for nearly two years to a slight extent before its nature was detected. The development of all the characteristic symptoms to a degree of considerable severity led to the disease being diagnosed, and under the treatment appropriate to the cure of psilosis she has made a good recovery. Although she had not enjoyed robust health after her return from China, suffering particularly from anæmia, she had never had symptoms of "sprue" until two years ago.

The proximate cause of psilosis is not known, but the probability that it consists in some organic ferment, very possibly a bacterium, is strong, and I think it likely that the curative action of milk diet is not due to any special therapeutic virtue of milk, but to the fact that it does not contain the pabulum in which this ferment can live. It is impossible otherwise to account for the fact that not only do the soothing foods which are so useful in other forms of diarrhœa not cure this form, but they will often bring on at once a severe relapse. I have often known arrowroot bring back diarrhœa and sore mouth after the patient had not had either symptom for several weeks. The same thing applies, in my experience, to beef-tea and bread, and severe and persistent relapses were produced in two patients by a raw, newlaid egg. It seems to me impossible to account for these facts otherwise than by assuming that in the egg, beef-tea, arrowroot, and I may add wheaten bread, a ferment can multiply with a rapidity that cannot be attributed to any inorganic substance.

UNIVERSITY OF JURJEFF.—The report of the University of Jurjeff (still better known probably by its old name of Dorpat) for 1894 show that on December 1st the total number of students was 1,546, of whom 754 belonged to the medical faculty.

## CANNABIS SATIVA SEU INDICA: INDIAN HEMP.

BY R. COWAN LEES, M.B., C.M., F.F.P.S.G.,
Glasgow.

IT has always been difficult to understand why the resin of this plant should alone be recognised in the *British Pharmacopœia*, more especially when we find it stated in works on the physiological action of this drug that in India several preparations are used by the natives to produce its stimulating and exhilarating effects, amongst which watery infusions are specially mentioned.

During a short visit to India some years ago my attention was drawn to the fact that several modes of using the herb were employed by the natives—modes not capable of extracting much, if even any, of the resin. So far as I could observe, watery infusions were commonly used, but whether in combination with other substances or not I am not in a position to state. This fact, however, led me to try what benefits might be derived from the use of a preparation of the plant, not depending on the resin alone.

Messrs. T. and H. Smith, who first obtained the resin in a state of comparative purity, state that "it is a brown amorphous solid, burning with a bright white flame, and leaving no ash; powerful in its action when taken internally, and that two-thirds of a grain act as an active narcotic, whilst 1 grain produces complete intoxication"; but the question might be advisedly asked, Is it completely freed from its essential oil? As a matter of fact, it is found that when the extract is kept for some time it becomes hard and brittle, and less potent in its action, a circumstance which goes a long way to prove that such a condition is the result of loss of volatile oil from the resin, and pharmacists are advised to "lay aside and not employ for medicinal use that which has become old."[1]

We are told by Bently and Trimen that "both Hindus and Mohammedans use this herb, either by smoking—with or without tobacco in combination with other substances—or by simple infusion in water."[2] Gunjah—guaza of our London market—has but a faint taste, with a peculiar but not unpleasant narcotic odour. These properties depend in a great measure on the volatile oil and resin. The latter some consider the more important constituent of the plant.

In the watery infusion employed by the Hindus and Mohammedans as mentioned above, we can conceive of little, if any, of the resin being dissolved and held in solution, whilst, on the other hand, much of the volatile oil might be dissolved by the water, together with other constituents of the plant. Dr. Personne regards the volatile oil as the sole active principle, and in proof of this he states that "when the volatile oil is inhaled, a distinct sensation of shuddering with motor excitement, followed by prostration and syncope, is experienced." Again, Dr. Preobrascher-sky has found a volatile alkaloid—most plentiful in the flowering tops—and which he considers somewhat similar in its action to nicotia or nicotine.

Feeling somewhat satisfied that water was capable of dissolving at least a portion of this volatile oil, and knowing that watery infusions of the drug were used for intoxicating and stimulating purposes in India, I had prepared for me a strong aqueous extract of the flowering tops of the female plant of the usual strength of liquid extracts, and from its use I have obtained good and satisfactory results. It possesses the anodyne and soporific action generally ascribed to the resinous extract, although in a modified degree. It has the characteristic odour of the hemp, has a beautiful deep amber colour, is miscible with water, and hence there is no difficulty in combining it with other liquids, and it presents no unseemly immiscible mixture repellent to a patient.

Liquor cannabis indicæ in my experience gives all the beneficial effects without the drawbacks of the tincture, avoiding those extreme exhilarating conditions bordering on intoxication, which are sometimes met with even when using a medium dose of the latter. It does not seem to in-

[1] *Squire's Companion to the British Pharmacopœia.*
[2] *Medicinal Plants*, vol. iv, page 231.

terfere with the secretion of mucus from the bronchial glands—a circumstance which renders it superior to opium in those cases suitable for its use, whilst in pulmonary affections generally it acts most favourably as a soporific and anodyne.

My greatest experience has been in the treatment of phthisis pulmonalis, and here I cannot speak of it too highly, for whilst it most perceptibly relieves the cough, it aids the patient by its stimulating and exhilarating qualities, supplying a remedial agent, in a manner which in my opinion no other drug can so beneficially do. In indigestion with constipation, and also in many of the affections of children, especially where nervous symptoms are present, it has also done good service. I do not presume for one moment that it will displace opium in those cases where severe pain is a prominent symptom, but I feel sure that in many cases where opium is at present used it may be substituted with great advantage.

The dose which I commonly use is half a fluid drachm for an adult, but it may be increased to a drachm in many cases, whilst for children corresponding doses to age may be adopted, though I have noticed that children are somewhat less susceptible to it than adults.

I may state that the fluid aqueous extract from the flowering tops of the female plant already referred to, has been prepared for me by Messrs. Rankin and Borland, pharmaceutical chemists, Kilmarnock, and I may further add that to avoid as far as possible the presence of the resin in the extract, the use of heat is entirely avoided in the preparation. Messrs. Park Davis and Co., of London, have likewise prepared a liquor for me which I have also found suitable. Many other firms have sent me samples which were miscible with water, but I found on examination these were only tinctures acted upon by alkalies, and gave the disagreeable reactions of the resin.

I trust that having found this preparation beneficial in my own practice, and feeling satisfied that it is one which may be successfully used in many of the more common ailments affecting the chest, other medical men will be induced to give it a trial, and if proved by them equally beneficial, it may in future find a place in medical therapeutics.

# MEMORANDA:

## MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

### FIBRO-SARCOMA OF PERITONEUM; REMOVAL; RECOVERY.

G. C., married, aged 34, was first seen on August 29th, 1894, when she complained of abdominal pain, worse on exertion, loss of flesh, anorexia, and a lump on the right side of her abdomen, which she had first noticed three weeks earlier, when it was the size of a shilling. The family history was unimportant. She had had good health up to three years ago, when she contracted typhoid fever, which left her weak and unable to work for some time. Since the attack, at intervals varying from one to three months, she had had pain in the right lumbar and iliac regions coming on suddenly, lasting a few days attended with constipation, sickness, and general *malaise*. On examination nothing abnormal could be made out on careful inspection, but on palpating the abdomen a rounded swelling the size of a duck's egg was readily felt, having its centre 2 inches to the right of the umbilicus. It felt hard and slightly nodular, appeared fixed to the abdominal wall, dull on percussion, and slightly tender. On dipping the ulnar sides of the hands on each side of it and then turning them in so as to get under the growth it could be lifted up with the abdominal wall and the edges of the hands very closely approximated. There was no pain or tenderness over McBurney's point. Examination by the vagina and rectum revealed nothing abnormal. A diagnosis of tumour of the abdominal wall—possibly tuberculous or sarcomatous—was made, and operation advised. The growth was found to increase slightly in size. Mr. Mayo Robson saw the patient on October 9th, 1894, and confirmed the diagnosis. On October 14th, assisted by Drs. Douglas and Vassalli, an incision 3 inches long was made over the growth, dividing the skin, subcutaneous tissue, and external oblique muscle. On cutting through the internal oblique the growth was cut into, and was found to be solid, infiltrating the deeper part of that muscle, and apparently enclosed in an indefinite capsule. The peritoneum was opened above the growth, and a large flat sponge inserted. An omental adhesion was divided. The growth with peritoneum and muscles was snipped round with scissors and removed. The peritoneum and muscles were brought together by interrupted silk sutures, and a double cyanide and blue wool dressing applied. The patient recovered without a bad symptom. On microscopical examination the growth proved to be a fibro-sarcoma.

J. A. Hutton, M.D., B.S., M.R.C.S, L.R.C.P.
Scarborough.

### THE CONTROL OF HÆMORRHAGE IN AMPUTATION AT THE SHOULDER.

Not having seen a description of the following method of controlling hæmorrhage in amputations at the shoulder-joint, I should like to draw attention to it, as others, like myself, may find it useful, especially in the country, when a skilled assistant may not be at hand:

The upper flap is first made by transfixion, reflected, all bleeding points secured, and the head of the humerus disarticulated. I then pass a strong notched needle through the lower flap, just under the surgical neck of the humerus, and hitch on to it a stout catgut ligature, which is drawn through and tied tightly over the inner edge of the flap, including the axillary vessels, skin and muscle. The lower flap is then cut out, the artery being now completely under control, the vessels tied, and the temporary ligature removed.

Having adopted this plan in two cases with most satisfactory results, I think it may be worth mentioning, although probably such a simple and effectual means of controlling hæmorrhage in this operation may have been already described.

Seaham, co. Durham. L. Gerald Dillon, M.D.

# REPORTS

ON

## MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

### THE ROYAL HOSPITAL, RICHMOND, SURREY.

#### A CASE OF DEATH FROM MUSSEL POISONING.

(By Edward B. Hill, B.A., M.B., B.C.Cantab., M.R.C.S., House-Surgeon.)

The patient was a very stout, powerful man, aged 49, by trade a cellarman at a local brewery. It appears from the history I obtained from his friends that he went to work as usual on the morning of January 8th. He was seen by a fellow workman between 11 and 12 on the same morning, and appeared to be in his usual health; soon after this he was seen coming out of the stores, his face "fiery red." He said that he had eaten some mussels, and that his hands and legs were itching. He then asked for a doctor to be sent for, as he thought he had been poisoned, remarking that he felt very bad. Before a doctor arrived he was put in a cab and removed to this hospital. On his admission, a little before 1, I examined him, and found that life was already extinct. I applied artificial respiration and injected stimulants, but there was no result. His face was extremely livid in appearance, and there was a quantity of frothy fluid oozing from his nose and mouth, the pupils were equal and normal in size.

I made a *post-mortem* examination and found the organs fairly healthy. The sinuses and veins of the brain were very much engorged with blood, but the brain itself was healthy. There was an abnormal amount of fat surrounding the heart, and the myocardium was pale, soft, and friable. The lungs were congested but otherwise healthy. The stomach was